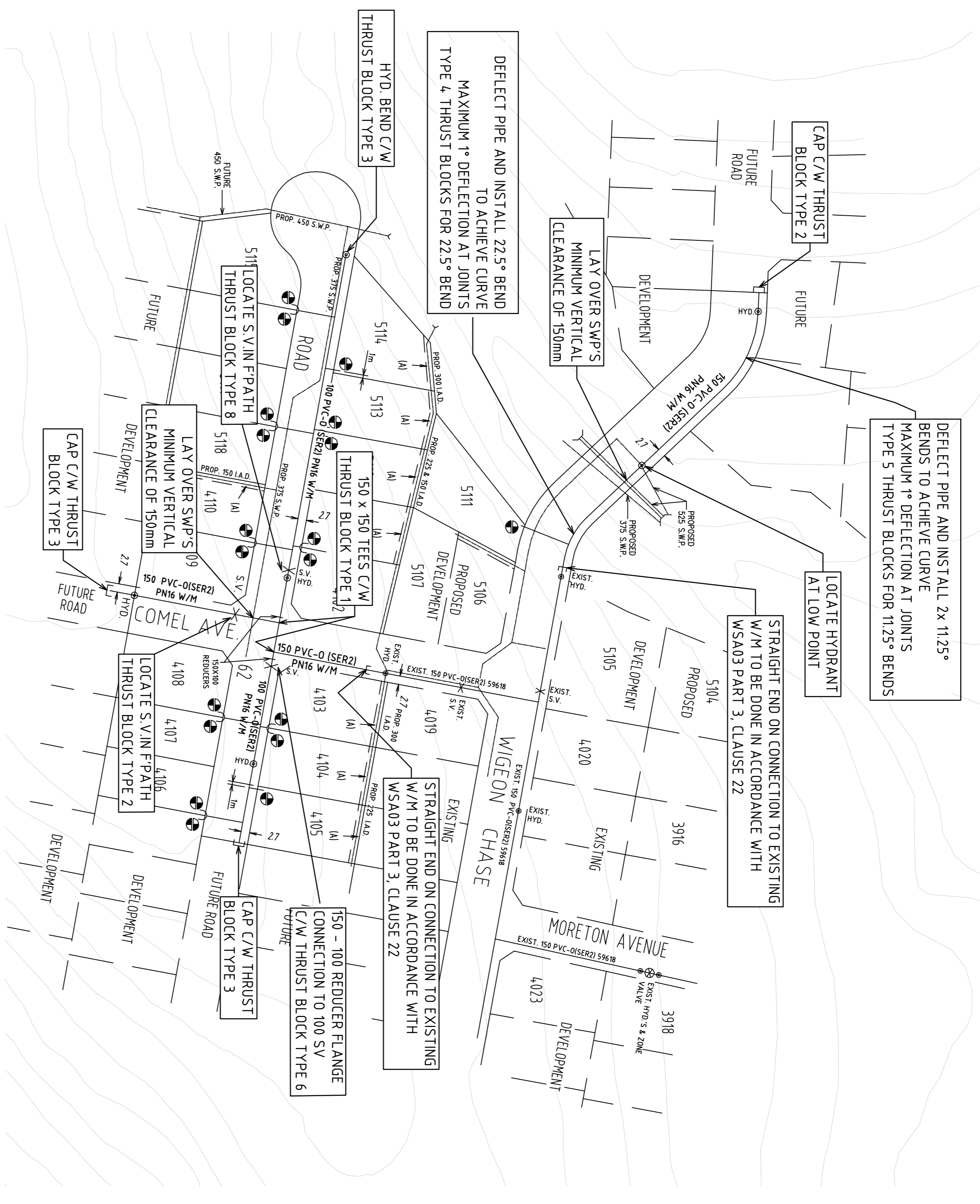
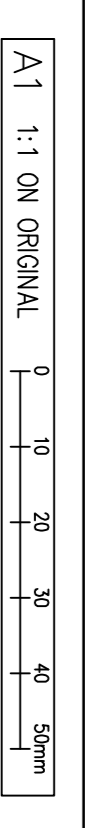


ORIGIN OF LEVELS
 10050 RL 45.452 AHD
 SCALE
 HORIZONTAL-1:1000



THRUST BLOCK DETAILS

TYPE	FITTING	DESIGN ADB ¹ WAD	DESIGN STP ² WAD	TA (m)	L (m)	H (m)	W (m)
1	150 x 150 TEE	50	1000	0.5	0.9	0.6	2x
2	150 CAP / 150 SV	50	1000	0.5	0.75	0.75	2x
3	100 CAP	50	1000	0.24	0.5	0.5	2x
4	150 x 22.5° BEND	50	1000	0.2	0.5	0.4	2x
5	150 x 11.25° BEND	50	1000	0.1	0.4	0.3	2x
6	150-100 REDUCER FL CONNECTION TO 100 SV	50	1000	0.5	0.75 ³	0.75	2x
7	150-100 REDUCER	50	1000	0.26	0.5	0.6	2x
8	100 SV	50	1000	0.24	0.4	0.6	2x

NOTES:

- NOTES SHOULD BE INCLUDED TO DETAIL PROJECT REQUIREMENTS, REGULATORY REQUIREMENTS (E.G. OHS, ENVIRONMENTAL) AND TO SUPPLEMENT THE WATERMAIN CONSTRUCTION REQUIREMENTS FROM MSA 03 HMC EDITION PART 3).
- CONSTRUCTION PART 3).
- NOTES SHOULD BE PROJECT SPECIFIC.
- NOTES SHOULD ADDRESS ANY DETAIL OMITTED FROM STANDARD DRAWINGS 1

(EXAMPLE NOTES)

- WORKS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, CONSTRUCTION SPECIFICATION, MSA 03 HMC EDITION PART 3.
- CONSTRUCTION AND MSA 03 HMC EDITION STANDARDS DRAWINGS.
- THE CONSTRUCTOR IS TO VERIFY THE POSITIONS AND LEVELS OF ALL EXISTING AND PROPOSED BOUNDARIES, SERVICES, PIPES, CABLES AND COLLAR.
- BOUNDARIES SHOWN TO OTHER PIPES HAVE BEEN CALCULATED FROM THE PRODUCTS AND MATERIALS TO BE SELECTED FROM THE HMC APPROVED PRODUCTS AND MATERIALS REGISTER.
- HYDRANTS, STOP VALVES AND ALL OTHER FITTINGS TO BE THE SAME SIZE AS THE THROUGH WATER MAIN.
- HYDRANTS MUST NOT BE POSITIONED IN DRIVEWAYS OR TAPPING POINTS. BOUNDARIES NOMINALLY AT LEAST 5M FROM EACH BOUNDARY OR ON BOUNDARIES.
- ALL PIPES AND FITTINGS TO BE AT HMC PREFERRED MINIMUM COVER (WAT-1201-VI).
- FOOTWAYS - 0.6M TYPE B EMBEDMENT WAT-1202-V.
- ROADWAYS - 0.75M TYPE L EMBEDMENT WAT-1204-V.

THRUST BLOCK NOTES:

- CONCRETE THRUST BLOCKS ARE TO BE PROVIDED FOR ALL FITTINGS IN ACCORDANCE WITH TABLE 2.
- THRUST BLOCK DIMENSIONS ARE BASED ON THE MINIMUM ALLOWABLE HORIZONTAL BEARING PRESSURES OF THE SOIL AS SHOWN. IF GROUND CONDITIONS ENCOUNTERED INDICATE THAT THESE BEARING PRESSURES MAY NOT BE ACHIEVED THRUST BLOCK DESIGNS TO BE REVISED.
- THRUST BLOCKS ARE TO BE CONSTRUCTED SUCH THAT THEY TRANSFER THE THRUST ONTO UNDISTURBED GROUND.
- CONCRETE FOR THRUST BLOCKS TO BE GRADE S25 USING CEMENT TYPE "SR" TO AS9972.
- CONCRETE TO BE MECHANICALLY VIBRATED.
- CONCRETE THRUST BLOCKS ARE TO BE CURED FOR A MINIMUM OF 7 DAYS BEFORE BEING SUBJECTED TO ANY THRUST LOAD.
- REFER TO WAT-1205-V FOR GENERAL FITTING THRUST BLOCK ARRANGEMENTS.
- REFER TO WAT-1207-V FOR GENERAL VALVE THRUST BLOCK ARRANGEMENTS.

WATER PIPE DATA

PIPE SIZE (mm)	PIPE TYPE	LENGTH (m)	PIPE	
			TYPE	LENGTH (m)
100	PVC-O (SER2)	180	PN16	
150	PVC-O (SER2)	215	PN16	

PRELIMINARY ISSUE
 NOT FOR CONSTRUCTION

- SERVICE CONNECTIONS**
- TOTAL 19 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V.
 - 2 x SHORT SIDE
 - 1 x LONG SIDE
 - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V.
 - 2 SHORT SIDE
 - 5 LONG SIDE

CONSULTANT DETAILS

DESIGNED (NAME)	DATE	COMPANY (COMP. NAME)
DRAWN (NAME)	DATE	COMPANY (COMP. NAME)
CHECKED (NAME)	DATE	COMPANY (COMP. NAME)
APPROVED (NAME)	DATE	COMPANY (COMP. NAME)

CONSULTANT DETAILS

CONSULTANT REFERENCE NO.	
DESIGN CERTIFIED AS COMPLYING WITH MSA03 WATER SUPPLY CODE OF AUSTRALIA (EXCEPT WHERE NOTED)	
CHECKED AND CERTIFIED BY: (FULL NAME)	

HGL	= 78.00(m)
SYSTEM TEST PRESSURE (STP)	= 1000kPa (100m)

CONSTRUCTION ISSUE	REVISION DETAILS	DWN	DATE	CONSULTANT REFERENCE NO.
0		JN	25/8/10	

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z
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No.	CONSTRUCTION ISSUE	REVISION DETAILS	DWN	DATE	CONSULTANT REFERENCE NO.
0			JN	25/8/10	

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z
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SIZE	SCALE	INDEX No.	DRAWING No.	SHEET	REV. No.
A1	1:1000	(FROM HWC)	(FROM HWC)	1	1

Plot Date: 23/04/10 - 10:22 Cad File: M:\ADMINISTRATION\HWC\CIVIL\WORKING\HWC_Civil_A1a.dwt